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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,698	02/13/2002	Junichi Kinoshita	81788.0216	1843
7590 12/20/2005				
Hogan & Hartson, LLP Suite 1900 500 South Grand Avenue Los Angeles, CA 90071			EXAMINER FLORES RUIZ, DELMA R	
			ART UNIT 2828	PAPER NUMBER

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/076,698

Applicant(s)

KINOSHITA, JUNICHI

Examiner

Delma R. Flores Ruiz

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,5,7-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 - 19 and 23 is/are allowed.
- 6) ☒ Claim(s) 2, 4-5, 7-16, 21, 22 AND 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/27/05</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|--|

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10/27/2005 have been considered by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 3, Character 10'. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 4-5, 7-16, 21, 22 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitation in claim 2 and 21 reciting "on a superstrate side" is not supported by the original disclosure or specification.

Claims 2, 4-5, 7-16, 21, 22 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The newly added limitation in claim 2 and 21 reciting "on a superstrate side" is not supported by the original disclosure or specification.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2,5, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Chow et al (5,712,865).

Regarding claim 2, Chow discloses a semiconductor substrate (see Fig. 1, Character 12); active layer (see Figs. 1, Character 18) on a first major surface of said semiconductor substrate (see Figs. 1, Characters 12); a first optical reflector (see Figs. 1, Character 14) interposed between said semiconductor substrate (see Fig. 1, Character 12) and said active layer (see Figs. 1, Character 18); and a second optical reflector (see Figs. 1, Character 16) provided on a superstrate side of said active layer, said first and second optical reflectors exciting resonance of light in said active layer in a direction substantially normal to the major surface of said substrate (see Figs. 1), said active layer having side surfaces at the longitudinal ends of the active, layer the

side surfaces of said active layer offset from vertical planes normal to the major surface of said semiconductor substrate (see Figs. 1).

Regarding claim 5, Chow discloses side surfaces of said active layer are made by cleavage (see Fig. 1).

Regarding claims 21 and 22, Chow discloses a surface emitting laser comprising: a semiconductor substrate (see Figs. 1, Character 12); active layer (see Figs. 1, Character 18) on a first major surface of said semiconductor substrate (see Figs. 1, Characters 12) and one or more reflective (see Fig. 1, Characters 14 and 16) or diffractive optical elements formed on a substrate (see Fig. 1, Character 12) or superstrate side of the active layer (see Fig. 1, Character 18) for exciting resonance of light in the active layer in a direction substantially normal to said major surface of said substrate, said active layer having planar side surfaces (see Figure 1) which are offset from vertical planes normal to said major surface of said semiconductor substrate to prevent in-plane horizontal resonance of light in said active layer (see Figs. 1) and anti-reflection dielectric thin film (see Fig. 1 Character 34) is coated onto said side surface of said active layer (see Fig. 1 Character 18).

Response to Arguments

Applicant argues the prior art lacks: active layer offset from vertical planes normal to the major surface of said semiconductor substrate. The examiner disagree with the applicant arguments since the prior art does teach active layer offset from vertical planes normal to the major surface of said semiconductor substrate (see Fig. 1, Character 18). The active layer have offset from vertical planes normal as stated in the rejection above.

Allowable Subject Matter

Claims 4, 7 – 16 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17 – 19 and 23 are allowed.

The following is an examiner's statement of reasons for allowance: Claim 17 recites a surface emitting laser structure including the specific structure limitation of substrate, active layer, a waveguide layer, *said laser having a substantially rectangular*

element configuration when viewed from a directional normal to said first major surface of said semiconductor substrate, any of said surfaces of said substantially rectangular element being cleaved surfaces and the cleaved surfaces are offset from the vertical planes normal to the first major surface of the semiconductor substrate; said waveguide direction being not parallel with any of sides of the substantially rectangle, which is neither anticipated or disclosed nor suggested in any piece of available prior art, which is neither anticipated nor obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Sun Harvey can be reached on (571) -272-1835. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Delma R. Flores Ruiz
Examiner
Art Unit 2828



Min Sun Harvey
Supervisor Patent Examiner
Art Unit 2828

DRFR/MH
December 8, 2005